# The review of Automated Machine learning

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#### I. INTRODUCTION

As we all know([1]), deep learning, which has been used in a lot of research fields including image classification, image recognition, machine translation, has achieved remarkable achievements in those tasks. Take the image classification as an example, AlexNet () outperformed traditional computer vision methods on ImageNet (Russakovsky et al., 2015), which was in turn outperformed by VGG nets (Simonyan & Zisserman, 2015), then ResNets (He et al., 2016) etc.

#### II. METHODS

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#### A. Bayesian Optimization

### B. Gradient-based

# C. Meta Learning

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## D. Evolutionary Algorithm

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## E. Reinforcement Learning

## III. COMPARISON AND ANALYSIS

## A. Units

- Test test test
- · Test test test

# IV. CONCLUSIONS

### **APPENDIX**

#### ACKNOWLEDGMENT

# REFERENCES

[1] L. Xie and A. Yuille, "Genetic CNN," *arXiv:1703.01513* [cs], Mar. 2017, arXiv: 1703.01513. [Online]. Available: http://arxiv.org/abs/1703.01513